

CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION
OFFICE OF THE STATE FIRE MARSHAL
FIRE ENGINEERING - BUILDING MATERIALS LISTING PROGRAM

LISTING SERVICE

LISTING No. 3230-1404:107 Page 1 of 1

CATEGORY: Leakage Dampers (Smoke)

LISTEE: C & S Air Products, 2824 N. Sylvania Ave., Fort Worth, TX 76111
Contact: Michael Beaver (817) 831-7038

DESIGN: Model FSD-181, FSD-182, SD-181 and SD-182 single and multi blade type leakage rated dampers. Unit is constructed of No. 20 Gage galvanized steel frame, No. 24 gage galvanized steel blades. Refer to listee's data sheet for detailed product description and operational considerations. Sizes of dampers are as follow:

<u>Model</u>	<u>Construction</u>	<u>Width, Inch</u>		<u>Height, Inch</u>	
		<u>Min.</u>	<u>Max.</u>	<u>Min.</u>	<u>Max.</u>
FSD	Single section	8	30	8	50
	Multiple section	8	90	8	100
SD	Single section only	8	36	8	50

RATING: SD-181, FSD-181: Class I-250, Class I-350
SD-182, FSD-182: Class II-250, Class II-350

INSTALLATION: In accordance with listee's printed installation instructions, applicable codes & ordinances and in a manner acceptable to the authority having jurisdiction.

MARKING: Listee's name, model number, classification and UL label.

APPROVAL: Listed as Class I or II leakage-rated dampers. *Intended for use with approved damper operators. For vertical installation installations only.

NOTE: For fire rated classification, refer to CSFM Listing Cat. 3225.

XLF: 3230-0368:116

*Rev. 11-06-2001



This listing is based upon technical data submitted by the applicant. CSFM Fire Engineering staff has reviewed the test results and/or other data but does not make an independent verification of any claims. This listing is not an endorsement or recommendation of the item listed. This listing should not be used to verify correct operational requirements or installation criteria. Refer to listee's data sheet, installation instructions and/or other suitable information sources.

Date Issued:

JUNE 22, 2004

*Listing Expires **June 30, 2005***

Authorized By:

**DIANE K. AREND, Senior Deputy
Program Manager**